

CLAIMS

I claim:

1. A method of controlling interoperability of members of a cluster, comprising:
 - (a) creating a version control record comprising all versions of each type of data structure in a shared resource; and
 - (b) validating software compatibility of a new cluster member with each data structure using the version control record prior to a new cluster member joining said cluster.
2. The method of claim 1, further comprising scanning a data structure type record within said shared resource prior to accessing said version control record.
3. The method of claim 1, wherein the step of validating software compatibility of a new cluster member includes scanning said version control record for a data structure version conflict.
4. The method of claim 1, further comprising maintaining a table within said version control record of an operating software version of each node in said cluster.
5. The method of claim 4, further comprising validating compatibility of each node in said cluster with said operating software version table prior to upgrading each data structure in said shared resource.
6. The method of claim 5, wherein the step of validating compatibility of each of said nodes in said cluster is inclusive of inactive cluster nodes.

7. The method of claim 1, wherein said shared resource is selected from a group consisting of: a storage area network, and shared memory.
8. A computer system, comprising:
 - at least two nodes adapted to operate in a computer cluster;
 - a version control record in a shared resource of said cluster;
 - said version control record inclusive of all versions of each type of data structure in said shared resource; and
 - a membership manager adapted to validate compatibility of a new cluster member with each of said data structure with use of said version control record prior to acceptance of said new cluster member.
9. The system of claim 8, further comprising an operating software version table within said version control record.
10. The system of claim 9, further comprising a validation manager adapted to validate compatibility of an existing cluster member with said operating software version table prior to an upgrade of each data structure in said shared storage.
11. The system of claim 10, wherein said validation manager is inclusive of inactive cluster nodes.
12. The system of claim 8, further comprising a version manager adapted to scan a data structure type record within said shared resource prior to access of said version control record by a cluster member.
13. The system of claim 8, wherein said shared resource is selected from a group consisting of: a storage area network, and shared memory.

14. An article comprising:
 - a computer-readable signal-bearing medium;
 - means in the medium for a version control record inclusive of each type of data structure in a shared resource; and
 - means in the medium for validating compatibility of a new cluster member with each data structure in said shared resource using said version control record prior to joining said cluster.
15. The article of claim 14, wherein the medium is selected from a group consisting of: a recordable data storage medium, and a modulated carrier signal.
16. The article of claim 14, further comprising means in the medium for validating compatibility of each cluster member prior to upgrading each data structure in said shared resource.
17. The article of claim 16, wherein said compatibility validation means is an operating software version table within said version control record.
18. The article of claim 16, wherein said compatibility validation means includes inactive cluster nodes.
19. The article of claim 14, further comprising means in the medium for scanning a data structure type record prior to access of said version control record.
20. The article of claim 14, wherein said shared resource is selected from a group consisting of: a storage area network, and shared memory.